



# Optimizing Android Apps with Google Analytics

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Feedback: <http://goo.gl/6tWkP>

Hash Tag: #Android



## Dashboard

Intelligence Beta

Visitors

Traffic Sources

Content

Goals

Custom Reporting

## My Customizations

Custom Reports

Advanced Segments

Intelligence Beta

Email

## Help Resources

About this Report

Conversion University

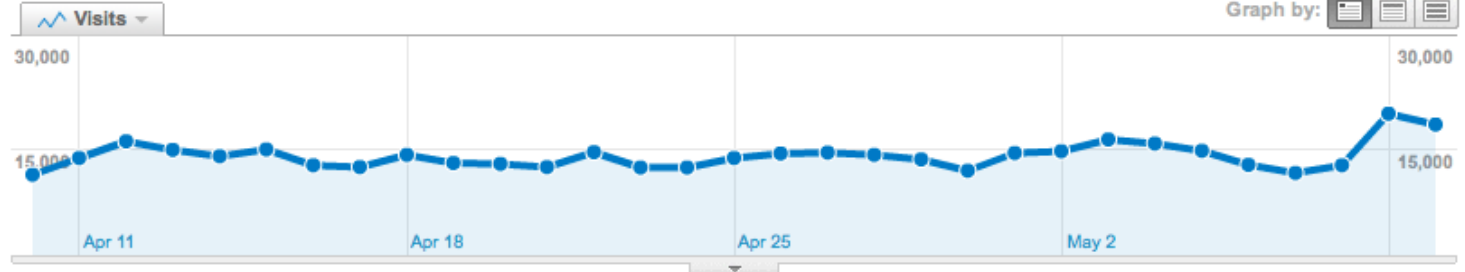
Common Questions

Export | Email

Advanced Segments: All Visits

## Dashboard

Apr 10, 2011 - May 10, 2011



## Site Usage

437,236 Visits

1,186,969 Pageviews

2.71 Pages/Visit

67.27% Bounce Rate

00:00:48 Avg. Time on Site

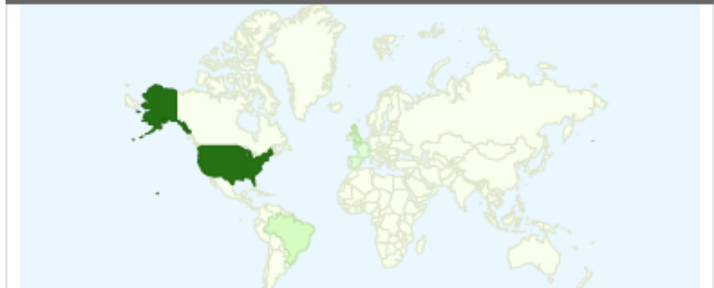
91.27% % New Visits

## Visitors Overview

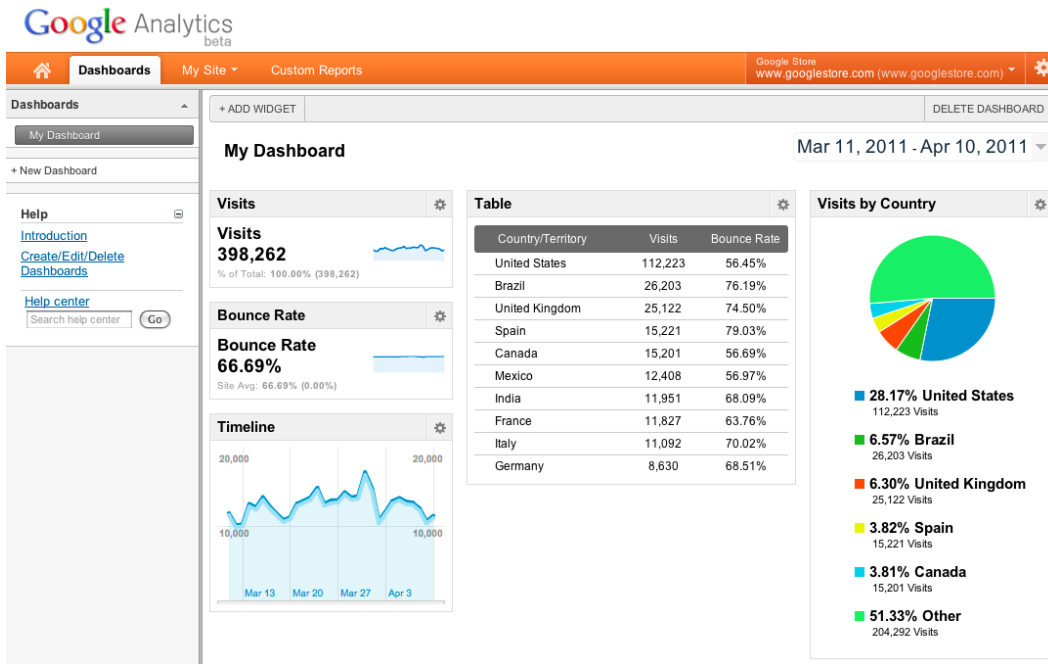


411,102 Visitors

## Map Overlay



# Google Analytics v5



- Free, Easy to Install, Robust, Scalable
- “How can we improve user interaction for our sites & apps?”
- “What content are visitors engaged with?”

## Web



BlueShield



## Rich Media



Microsoft  
Silverlight

The New York Times

WELCOME TO THE FUTURE. YOUR NEWSPAPER IS!

Times Reader 2.0 is now powered by Adobe AIR. Get our latest innovation in newspapers! for only \$6.49 a week. It's 7 days of the best journalism in the world.



Whether it's a new article, you'll find it all in your newspaper. Or, you can get it all in your newspaper. Or, you can get it all in your newspaper. Or, you can get it all in your newspaper.



## Mobile



## Social



Google Analytics

# Google Analytics Android SDK



## Native App Tracking

Learn how users interact with applications

Tracks:

- Unique Users
- Pageviews
- Events
- Ecommerce
- Custom Variables
- Market Referrals

# Getting Started

1. Download SDK: [code.google.com/mobile/analytics](http://code.google.com/mobile/analytics)  
– `libGoogleAnalytics.jar`

2. Link the library to your application

3. Configure `AndroidManifest.xml`

```
<uses-permission android:name=  
    "android.permission.INTERNET" />
```

```
<uses-permission android:name=  
    "android.permission.ACCESS_NETWORK_STATE" />
```

# Setting Up A Tracker Object In An Activity

```
GoogleAnalyticsTracker tracker;
```

```
onCreate
```

```
    tracker = GoogleAnalyticsTracker.getInstance();  
    tracker.start("UA-xxx-y", this);
```



# Dispatching Events

Tracked data is queued and dispatched in bundles

- Saves battery life
- Can track when users are offline

```
tracker.dispatch();
```


- or -

```
tracker.start("UA-xxx-y", 20, this);
```

# Tracking Activity Views

- How many people are viewing an activity?
- How many people are watching a view?

Viewing: **Page** Page Title Other ▾

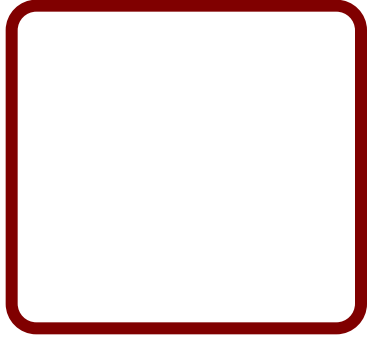
Secondary dimension: <input type="text" value="Select..."/>		Search ▾		View: <input type="text" value="Table"/>		1 - 3 of 3 <input type="button" value="◀"/> <input type="button" value="▶"/>	
Page	Pageviews	↓ Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit		
1. <a href="#">/NotesList</a>							
2. <a href="#">/NoteEditor</a>							
3. <a href="#">/TitleEditor</a>							

Show rows:    Go to:  1 - 3 of 3

# Pageview Tracking Demo

- Notepad app demo of tracking pageviews for activities

# Reporting Activity Views



# Reporting Unique Users



The screenshot shows the Google Analytics interface for Custom Reports. At the top, there is an orange navigation bar with a home icon, "Dashboards", "My Site" with a dropdown arrow, and "Custom Reports". Below this is a sidebar on the left with a "Custom Reports" header and an "Overview" button. At the bottom of the sidebar is a "Help" section with a link to "Create a Custom Report". The main content area on the right is titled "Custom Reports" and features a "+ New Custom Report" button and a form with a "Title" label and an empty input field.

# Reporting Unique Users

Report Tab

+ add report tab

Name:  ×

Type:  ⬇

**Dimensions:** select up to 2 dimensions

Page ⬇ ×

+ add dimension

**Metrics:** select up to 25 metrics

Total Visitors ⬇ ×

Pageviews ⬇ ×

+ add metric

Visible in **'Notepad App'** profile and

Save

Cancel

# Reporting Unique Users

Custom Reports

Overview

Unique Visitors By Page

Help

[Create a Custom Report](#)

[Custom Report Filters](#)

[Explorer vs. Flat Tables](#)

[Help center](#)

Search help center

ADVANCED SEGMENTS ▾ EXPORT ▾ EDIT

## Unique Visitors By Page

Mar 15, 2011 - Apr 14, 2011 ▾

100.00% of total total visitors

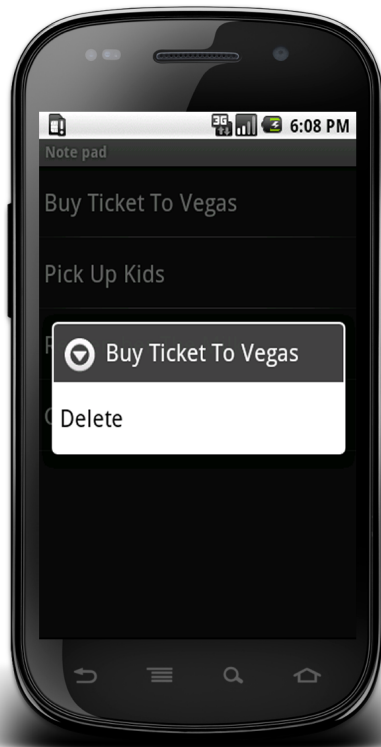
Report Tab

	Page	Total Visitors	Pageviews
1.	/NotesList	65,783	185,824
2.	/NoteEditor	65,783	129,023
3.	/TitleEditor	47,812	99,256

Show rows: 10 ▾ Go to: 1 1 - 3 of 3

# Tracking User Interactions

- How many times do users delete notes?
- From which part in the application do people delete notes?





# Event Tracking Implementation Demo

- Tracking when somebody deletes a note

# Reporting User Interaction

**Visitors**

- Overview
- Demographics
  - Location
  - Language
  - Custom Variables
  - User Defined
- Behavior
- Technology
- Traffic Sources**
  - Content**
    - Overview
    - Site Content
    - Site Search
    - Events
      - Overview
      - Top Events**
      - Pages
  - AdSense
- Conversions

**Help**

[The Top Events Report](#)

[Viewing Metrics](#)

[Help center](#)

ADVANCED SEGMENTS ▾
EXPORT ▾

## Top Events

Mar 18, 2011 - Apr 17, 2011 ▾

100.00% of total unique events

**Explorer**

Event   Site Usage   Ecommerce

<b>Total Events</b> <span style="font-size: 1.2em; font-weight: bold;">104,234</span> <small>% of Total: 100.00% (23,268)</small>	<b>Unique Events</b> <span style="font-size: 1.2em; font-weight: bold;">80,291</span> <small>% of Total: 100.00% (10,415)</small>	<b>Event Value</b> <span style="font-size: 1.2em; font-weight: bold;">0</span> <small>% of Total: 0.00% (0)</small>	<b>Avg. Value</b> <span style="font-size: 1.2em; font-weight: bold;">0.00</span> <small>Site Avg: 0.00 (0.00%)</small>
---	---	---	--

Graph Mode: Line Chart   Compare Metric   Graph By: ☰

Viewing: **Event Category**   Event Action   Event Label

Secondary dimension: Select...   Search ▾   View: ☰   1 - 1 of 1   ◀ ▶

	Event Category	Total Events	Unique Events	Event Value	Avg. Value
1.	ui_interaction	104,264	80,291	0	0.00

Show rows: 10   Go to: 1   1 - 1 of 1   ◀ ▶

# Reporting User Interaction

Viewing: **Event Action** Event Label Other ▾

Secondary dimension:  Search ▾ View:  1 - 1 of 1 < >

	Event Action	Total Events ↓	Unique Events	Event Value	Avg. Value
1.	<a href="#">delete_note</a>	104,264	80,291	0	0.00

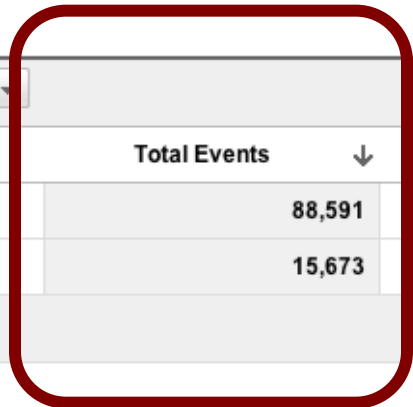
Show rows:  ▾ Go to:  1 - 1 of 1 < >

Viewing: **Event Label** Other ▾

Secondary dimension:  Search ▾ View:  1 - 0 of 0 < >

	Event Label	Total Events ↓	Unique Events	Event Value	Avg. Value
1.	NotesList	88,591	66,021	0	0.00
2.	NoteEditor	15,673	14,270	0	0.00

Show rows:  ▾ Go to:  1 - 0 of 0 < >



# Reporting User Interaction

Report Tab [+ add report tab](#)

---

Name:  ✕

Type:  ⌵

**Dimensions:** select up to 2 dimensions

⌵ ✕  ⌵ ✕

**Metrics:** select up to 25 metrics

⌵ ✕  ⌵ ✕

Visible in **'Notepad App'** profile and

[Cancel](#)

# Reporting User Interaction

ADVANCED SEGMENTS ▾

EXPORT ▾

EDIT

## Unique Visitors by Event

Mar 18, 2011 - Apr 17, 2011 ▾

100.00% of total total visitors

Report Tab

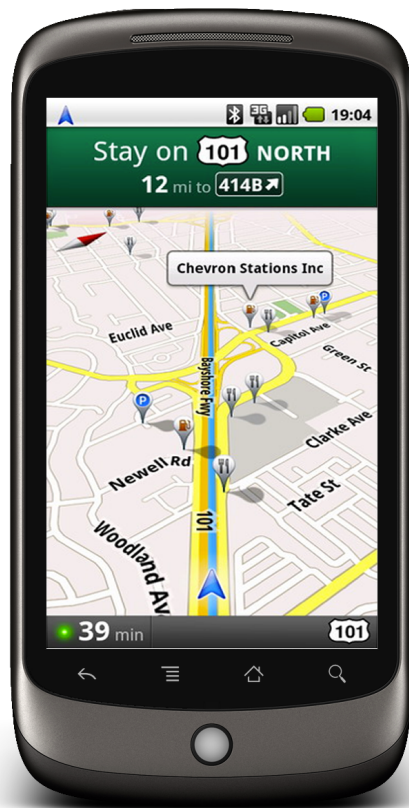
Event Action	Event Label	Total Visitors	Total Events
1. delete_note	NotesList	40,321	88,591
2. delete_note	NoteEditor	9,026	15,673

Search ▾ 1 - 1 of 1 < >

Show rows: 10 ▾ Go to: 1 1 - 1 of 1 < >

# Tracking User Preferences

- How does user behavior differ by orientation?

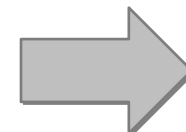
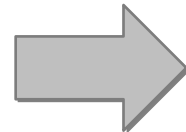
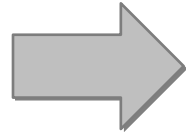


# Custom Variables

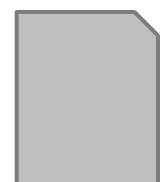
Visitor



Session

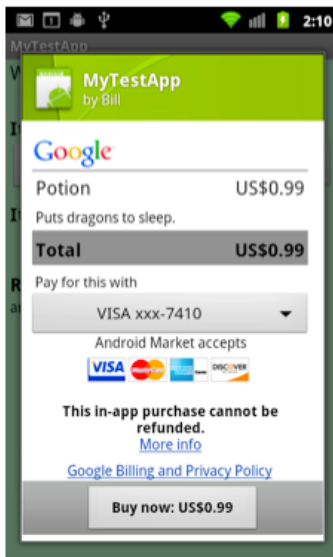


Page

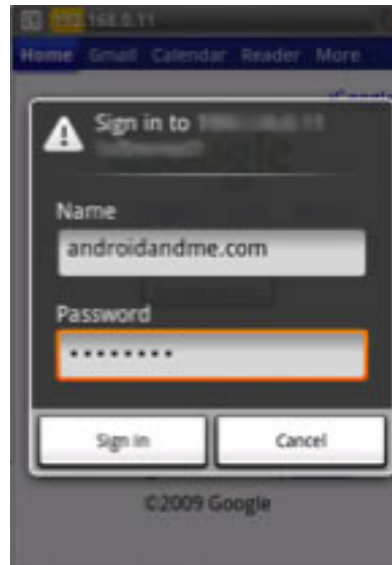


# Custom Variables

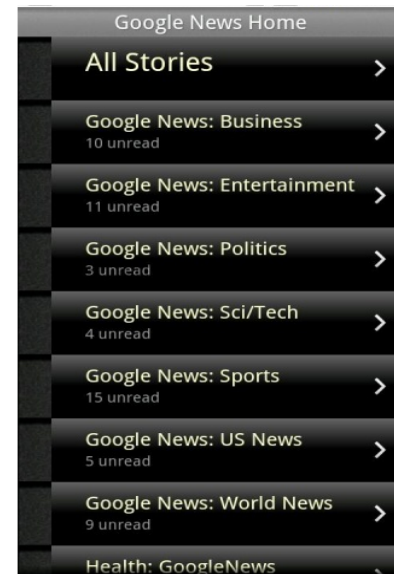
## Visitor



## Session



## Page





# Custom Variables

## Visitor

```
tracker.setCustomVar(1, "paid", "yes", 1);
```

## Session

```
tracker.setCustomVar(1, "logged_in", "yes", 2);
```

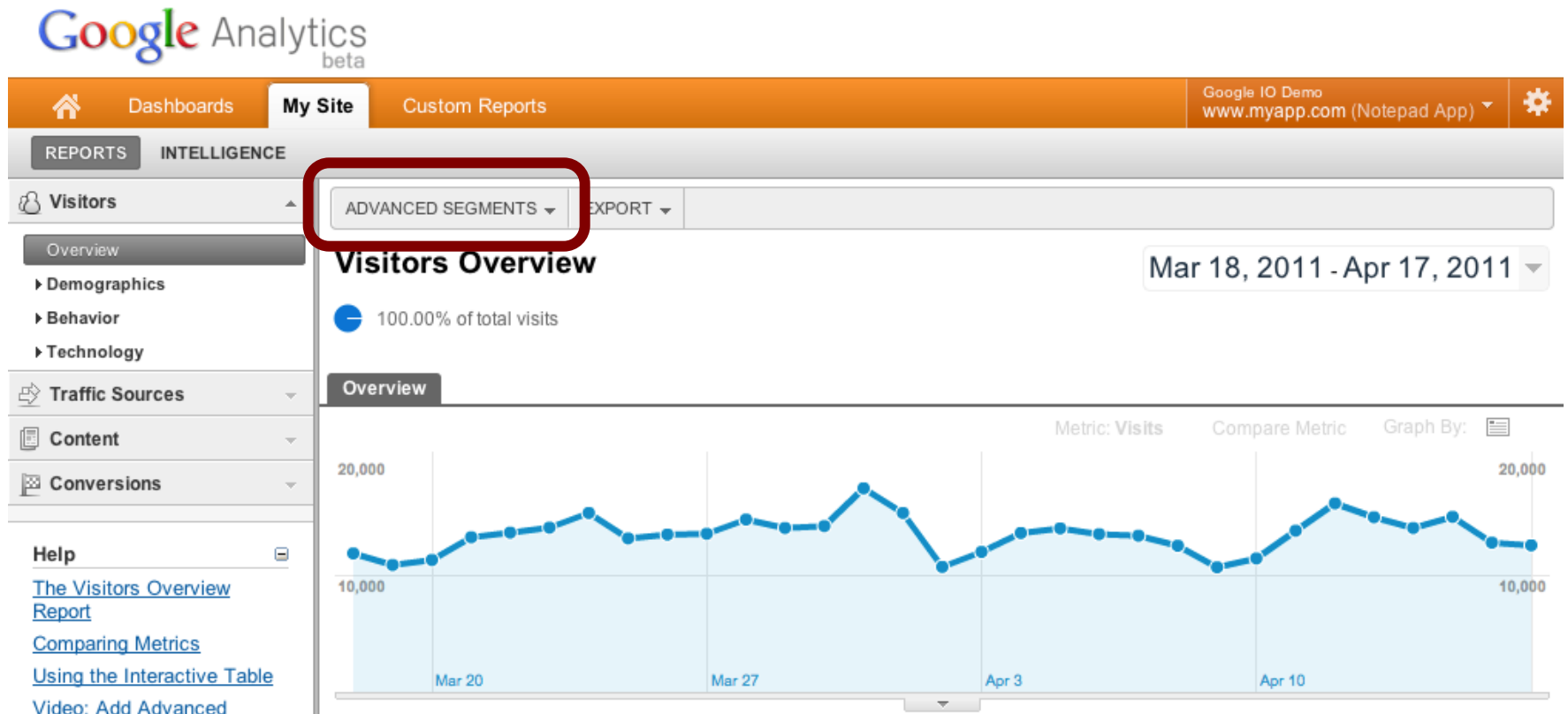
## Page

```
tracker.setCustomVar(1, "content_group", "news", 3);
```

# Custom Variable Implementation Demo

- When user changes orientation, set a session level custom variable
- Should happen before the activity tracking occurs

# Reporting on User Preferences



# Reporting on User Preferences

ADVANCED SEGMENTS ▾ EXPORT ▾

## Advanced Segments

Select up to four segments to compare

**Default Segments**

- All Visits
- New Visitors
- Returning Visitors
- Paid Search Traffic
- Non-paid Search Traffic
- Search Traffic
- Direct Traffic
- Referral Traffic
- Visits with Conversions
- Visits with Transactions

**Custom Segments**

[Create New Advanced Segment](#)

Apply cancel

# Reporting on User Preferences

ADVANCED SEGMENTS ▾ EXPORT ▾

**Name:**  
Orientation Portrait

---

Include ▾ Custom Variable (Value 1) ▾ Exactly matching portrait

or

Add 'OR' statement

and

Add 'AND' statement

Preview Segment

---

Save Segment Cancel

# Reporting on User Preferences

ADVANCED SEGMENTS ▾ EXPORT ▾

## Advanced Segments

Select up to four segments to compare [Create New Advanced Segment](#)

### Default Segments

- All Visits
- New Visitors
- Returning Visitors
- Paid Search Traffic
- Non-paid Search Traffic
- Search Traffic
- Direct Traffic
- Referral Traffic
- Visits with Conversions
- Visits with Transactions

### Custom Segments

- Orientation Portrait [edit](#)
- Orientation Landscape [edit](#)

Apply cancel

# Reporting on User Preferences

Custom Reports

Overview

Unique Visitors By Page


Mar 15, 2011 - Apr 14, 2011

100.00% of total total visitors

Report Tab

Page	Total Visitors	Pageviews
1. /NotesList	65,783	185,824
2. /NoteEditor	65,783	129,023
3. /TitleEditor	47,812	99,256

Show rows: 10 Go to: 1 1 - 3 of 3



# Reporting on User Preferences

Custom Reports

Overview

Unique Visitors By Page

Help

[Create a Custom Report](#)

[Custom Report Filters](#)

[Explorer vs. Flat Tables](#)

[Help center](#)

Search help center

ADVANCED SEGMENTS EXPORT EDIT

## Unique Visitors By Page

Mar 15, 2011 - Apr 14, 2011

Orientation Portrait 100.00% of total total visitors

Orientation Landscape 96.87% of total total visitors

Report Tab

Search 1 - 3 of 3

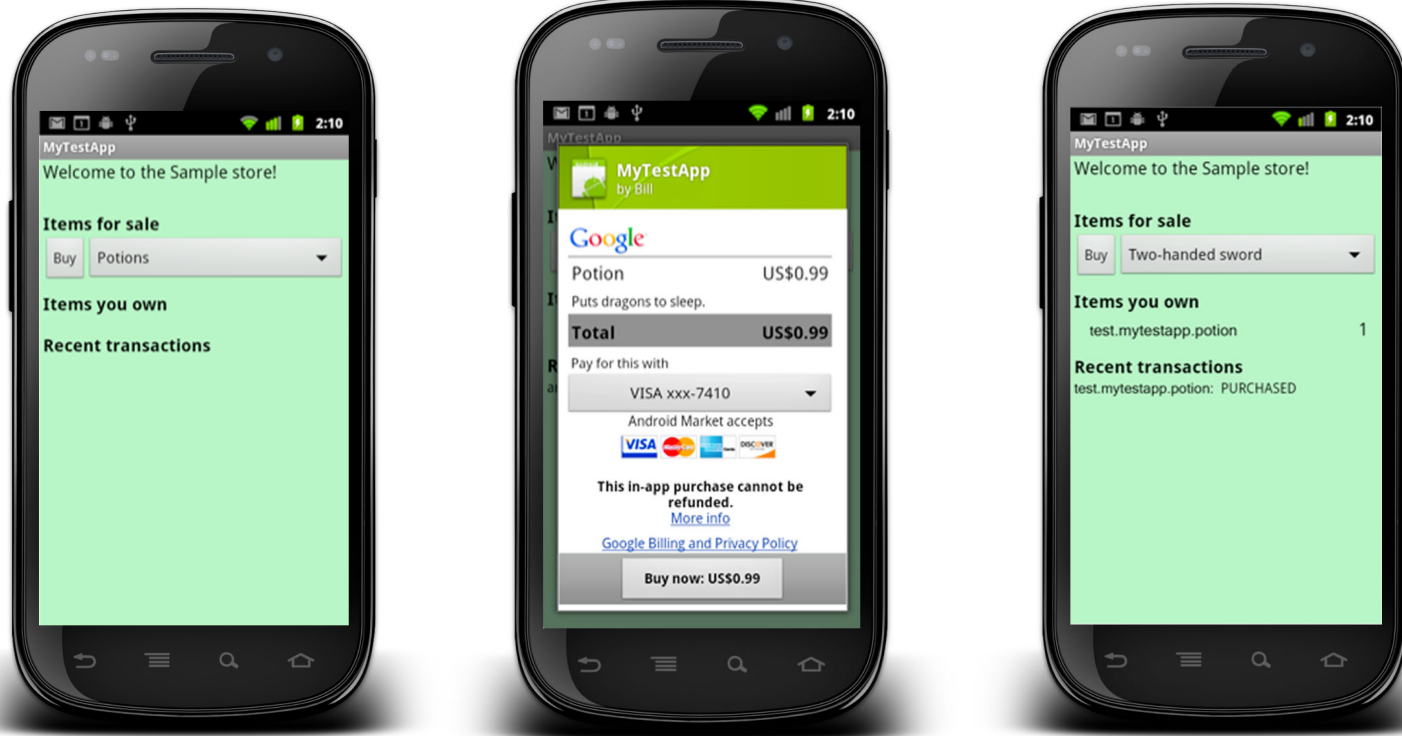
	Page	Total Visitors	Pageviews
1.	/NotesList		
	Orientation Portrait	65,783	139,368
	Orientation Landscape	20,281	46,456
2.	/NoteEditor		
	Orientation Portrait	65,783	41,934
	Orientation Landscape	63,721	87,089
3.	/TitleEditor		
	Orientation Portrait	19,125	39,702
	Orientation Landscape	28,687	59,554

Show rows: 10 Go to: 1 1 - 3 of 3

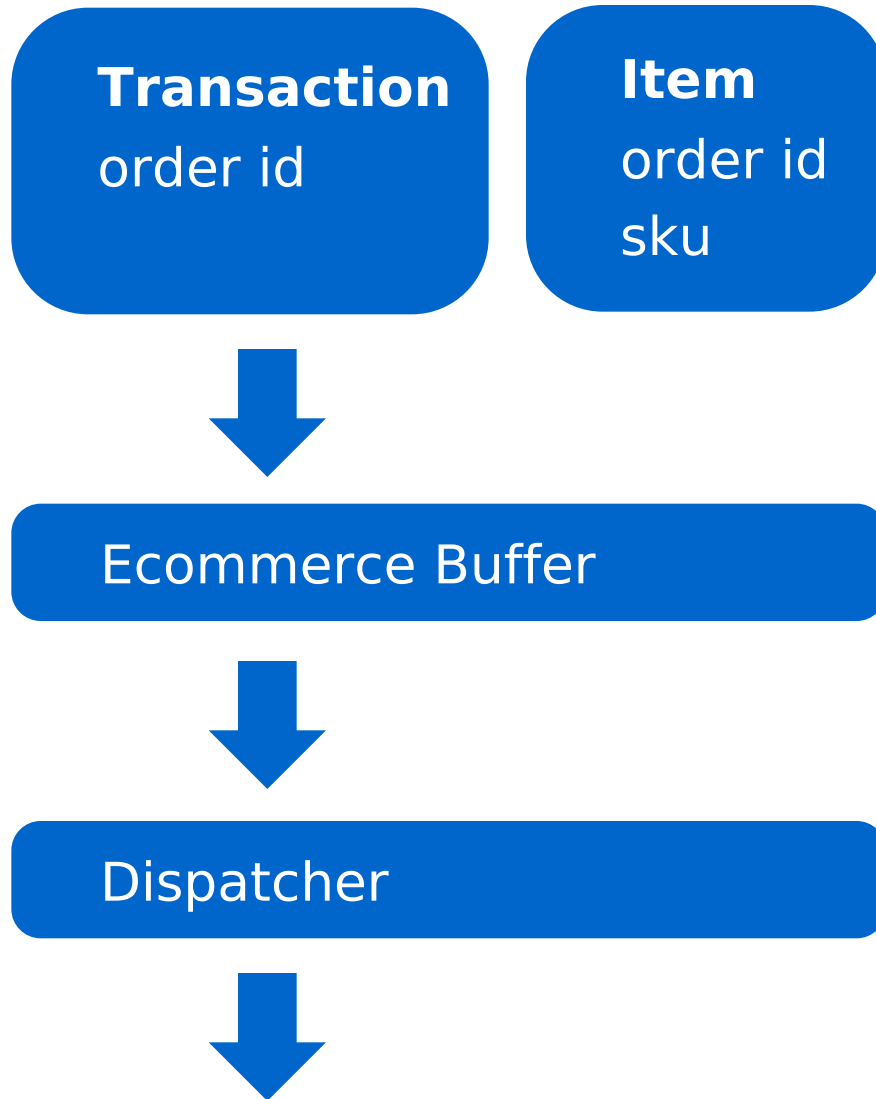


# Tracking In App Purchases

- How much revenue does my application generate?
- Which products are most popular?



# Ecommerce Tracking



addTransaction()  
addItem()

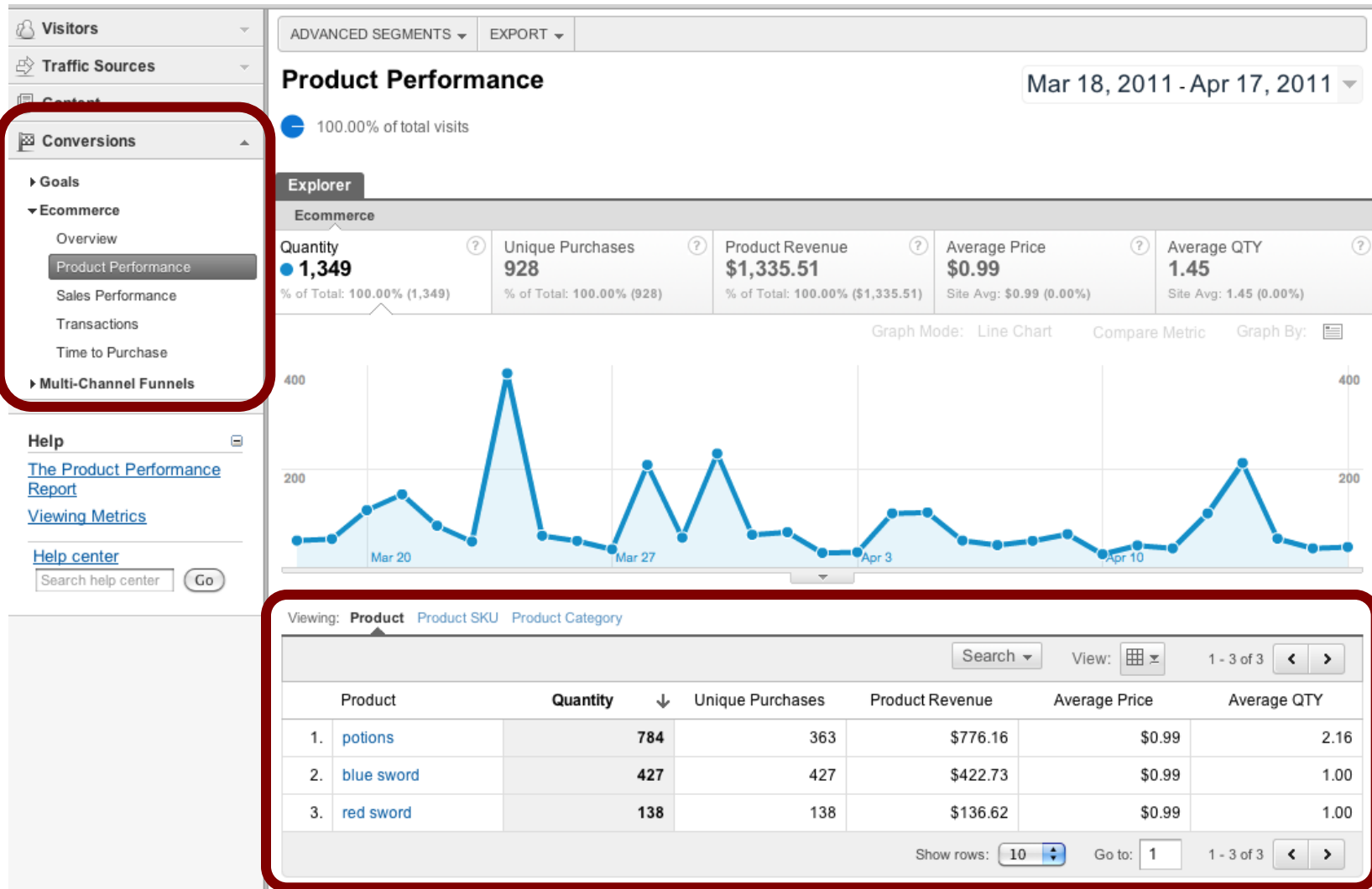
trackTransactions()

dispatch()

# Ecommerce Tracking Demo

- Implement ecommerce tracking on Android In App Billing

# Reporting In App Purchases



# Resources

Developer Documentation:

<http://code.google.com/mobile/analytics/>

Download the SDK:

<http://code.google.com/mobile/analytics/download.html>

Get Today's Code

<http://code.google.com/p/analytics-api-samples>

Feedback: <http://goo.gl/6tWkP>

Hash Tag: [#Android](#)

